United States Environmental Protection Agency

Statement of Work

Superfund Technical Assessment & Response Team (START)

REGION 1 8(a)
TASK ORDER # 1

I. Introduction

A. Purpose

The purpose of the Superfund Technical Assessment and Response Team (START) contract is to provide nationally consistent advisory and assistance services to Environmental Protection Agency (EPA) On-Scene Coordinators (OSCs) and other federal officials implementing EPA's responsibilities under the national response system. These responsibilities are described in the background below. The contractor shall fulfill these responsibilities within the region as well as outside the region on a backup regional response, cross regional response, national response, and international response. The contractor shall be prepared to provide scientific/technical support for EPA activities in furtherance of the agency's primary mission: the protection of human health and the environment. Additionally, the contractor shall provide advisory and assistance services to other programs, such as site assessment, Brownfields Program, and remedial support activities. For each assigned task, the contractor shall provide appropriately experienced, trained, and accredited personnel with current credentials/certifications, as well as all supplies, materials, tools, and equipment necessary to complete the job.

B. Background

Under the authority of legislation, Presidential Directives, and promulgated regulations, EPA is responsible for protecting human health and the environment. EPA is delegated authority to undertake removal and remedial response actions with respect to the release or threat of release of oil, hazardous substances, or pollutants and contaminants. The National Response Framework (NRF) is the principle federal mechanism for responding to releases of hazardous substances and oil, utilizing a multi-layered network of individuals and teams for federal, state and local agencies, and industry.

EPA's role under the NRF is to respond to emergencies within its area of jurisdiction, with respect to the release/discharge or threat of release/discharge of oil, hazardous substances, pollutants, contaminants, or fire or explosion hazard. Under several federal and regional contingency plans (RCP), EPA has the responsibility for coordinating all federal, state, local, and private efforts associated with responding to environmental emergencies. EPA is required to respond to chemical, biological, radiological, and nuclear (CBRN) events as part of a disaster or counter terrorism/weapons of mass destruction (CT/WMD) incident. EPA supports states and communities in their preparedness and response activities. EPA is responsible for conducting evaluations and cleanups of uncontrolled hazardous substance disposal sites and placing those that are considered to pose a significant threat to human health or the environment on the National Priorities List (NPL).

Site assessment is the first step in determining whether a site meets the criteria for placement on the NPL. Listing a site on the NPL is one tool among many that are available to EPA and state cleanup program managers to accomplish the cleanup of contaminated waste sites. For additional information, see EPA Office of Solid Waste and Emergency Response (OSWER) Directive 9203.1-06, "Guidance on Setting Priorities for NPL Candidates sites."

Generally, brownfield sites are real property where the expansion, re-development, or reuse may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. The formal definition of a brownfield site is found in Public Law 107-118 "Small Business Liability Relief and Brownfields Revitalization Act" of January 11, 2002.

II. Technical Requirements

A. Assessment/Inspection Activities

The primary objective of the site assessment phase is to obtain the data necessary to identify the priority sites posing threats to human health or the environment. The site assessment phase begins with site discovery or notification to EPA of possible release of hazardous substances. During all assessment/inspection activities, the contractor shall utilize environmentally preferable practices to the greatest extent practicable.

1. Pre-CERCLA Screening

Pre-CERCLA screening is the process of reviewing data on a potential site to determine whether the site should be entered into the Superfund Enterprise Management System (SEMS) for further evaluation. The contractor shall perform pre-CERCLA screening activities in accordance with EPA OLEM Directive 9200.3-107 "Pre-CERCLA Screening Guidance" dated December 2016.

2. Removal Assessment

The contractor shall provide technical support to EPA on removal assessment (RA) activities; and perform removal assessment activities in accordance with EPA OSWER Directive 9360.3-08, "Superfund Removal Procedures/The Removal Response Decision: Site Discovery to Response Decision" dated September 1994, and the NCP.

A removal assessment focuses on determining the potential immediate threat a site may pose on human health and the environment. The results of this assessment are used by EPA to determine whether a removal action or some other response is warranted.

3. Preliminary Assessment

The contractor shall provide technical support to EPA on preliminary assessment (PA) activities; review past and present facility waste handling practices and permit history; document the presence, quantity, type, or absence of uncontrolled or un-contained hazardous substance(s) on-site; document releases to the environment; identify pollution disposal pathways; determine pathway specific receptors and surrounding population density; locate other environmentally sensitive receptors (e.g., wetlands and endangered species); and perform PA activities in accordance with EPA OSWER Directive 9345.0-01A, "Guidance for Performing Preliminary Assessment Under CERCLA," dated Sept 1991; http://www.osti.gov/scitech/servlets/purl/189114 and the NCP; EPA OSWER Directive 9375.2-09FS, "Improving Site Assessment: Abbreviated Preliminary Assessments," at https://semspub.epa.gov/work/HQ/174004.pdf.

A PA is the first step in determining whether a site warrants a Superfund response after the site has been entered into SEMS. A PA focuses on determining/verifying whether a site is eligible for a response action under CERCLA and the need for immediate and/or long-term response actions.

4. Site Inspection

The contractor shall provide technical support to EPA on Site Inspection (SI) activities; and perform SI activities in accordance with EPA/540-R-92-021, "Guidance for Performing Site Inspections Under CERCLA," dated September 1992 at: http://www.osti.gov/scitech/servlets/purl/10122066. A SI incorporates and builds upon the objectives of the PA and may require the collection of samples or the evaluation of existing analytical data to evaluate site conditions.

5. Combined Preliminary Assessment/Site Inspection

The contractor shall perform preliminary search and field activities outlined in section II.A.3, PA and II.A.4, SI, simultaneously, in accordance with EPA OSWER Directive 9375.2-10FS, "Improving Site Assessment Combined Preliminary Assessment/Site Inspection Assessments" at https://semspub.epa.gov/work/HQ/174004.pdf.

6. Site Inspection Prioritization

The contractor shall perform site inspection prioritization (SIP) activities, in accordance with EPA OSWER Directive 9345.1-15FS, "Site Inspection Prioritization Guidance," dated August 1993, as amended.

The goal of SIP is to gather any additional information necessary following the completion of the SI to help set priorities among sites for NPL listing or to screen sites from further Superfund attention.

7. Site Reassessment

The contractor shall perform site assessment activities as described in sections II.A.2 and II.A.3 of this SOW. A Site Reassessment (SR) represents the gathering and evaluation of new information on a site previously assessed under the Superfund program to determine whether further Superfund attention is needed. A SR serves as a supplement to previous assessment work and not a replacement for traditional assessment activities. The scope of work for SR activity is flexible but will usually represent a component of a traditional site assessment action, PA, SI, and SIP. The purpose of this action is to document the expenditure of Superfund resources on older sites where EPA has received new information or learned that the site conditions have changed.

8. Expanded Site Inspections

The contractor shall perform expanded site inspection (ESI) activities, in accordance with EPA 540-R-92-021, "Guidance for Performing Site Inspections Under CERCLA," dated September 1992 at http://www.osti.gov/scitech/servlets/purl/10122066. The ESI has a twofold purpose: to provide additional information required to support preparation of an Hazard Ranking System (HRS) package for NPL listing which requires scoring of the site; and to further characterize and define a site for a potential response action, i.e., to begin a Remedial Investigation (RI).

9. Combined Expanded Site Inspection/Remedial Investigation

The contractor shall perform combined ESI/RI activities. The ESI/RI is used to expedite remedial response by gathering site characterization data common to both ESI and RI activities in one step, thereby expediting the later collection of data when comprehensive RI activities are performed.

10. Hazard Ranking System/National Priorities List Packages

The contractor shall perform HRS/NPL activities in accordance with EPA's HRS regulation contained in the NCP, Final Rule dated December 14, 1990, and EPA OSWER Directive 9345.1-07, "The Hazard Ranking System Guidance Manual," dated November 1992.

The HRS is the scoring system used by EPA's Superfund program to assess the relative threat associated with actual or potential release of hazardous substances. The HRS is the primary screening tool for determining whether a site is to be included on the NPL, and if response action is necessary under CERCLA. The document is available through http://r1-gis-web.r1.epa.gov:9876/cfdocs/r1apps/geocode/geo_input.cfm.

11. Integrated Assessments

The contractor shall assess the potential for short or long term clean-up actions; and perform integrated assessment (IA) activity in accordance with EPA OSWER Short Sheet 9345.16FS, "Integrating Removal and Remedial Site Assessment Investigations," dated September 1993. This document is available from EPA by requesting call number PB93-963341 or online at http://www.epa.gov/nscep.

IA activities should also be performed in accordance with Removal Site Evaluation and Site Inspection documents referenced in Sections II.A.2, Removal Assessment, and II.A.4, Site Inspection. The purpose of an IA is to gather data that meet the requirements of both a RA and a SI at the same site. The data gathering effort at these sites may require field screening and full Contractor Laboratory Programs (CLP) analysis of samples.

12. Targeted Brownfields Assessments (TBA)

A Targeted Brownfields Assessment (TBA) is a study conducted by EPA to determine the nature and extent of contamination. If requested, the assessment may also include an analyses of options and cost estimates associated with these options. Each EPA Regional office has the discretion to do determine what process/method they use to assess Brownfields sites. Therefore, this approach should be viewed as a dynamic and flexible process that will be tailored to specific project circumstances outlined specific task order document.

A TBA may require the following activities:

- Screening Survey. Background and historical information collection (screening survey);
- On-site inspection. Site inspection to find potential or actual areas of hazardous substance contamination including the types and general extent of contamination on site (e.g., soil, groundwater and contamination within buildings);
- Analytical report summarizing the information and data collection during the Brownfield Assessment;
- Conduct a screening-level risk assessment using published state and federal risk-based regulatory standards based on TBA findings and future land use scenarios; and
- Development of cleanup options and evaluation of the cleanup costs associated with a redevelopment plan for a specific site.

  For more information on Targeted Brownfield Assessment Programs in each Region, refer to http://www.epa.gov/brownfields/targeted-brownfields-assessments-tba.

13. Remedial Investigation/Feasibility Study

The contractor shall perform remedial investigation/feasibility study (RI/FS) tasks in accordance with EPA OSWER Directive 9355.301.h, "EPA Guidance for Conducting Remedial Investigation and Feasibility Studies under CERCLA," dated October 1988.

An RI/FS is an extensive assessment conducted at a site that is proposed/added to the NPL. The purpose of conducting an RI/FS is to develop the data necessary to support the selection of a remedy to eliminate, reduce, or control risks to human health and the environment.

14. Five-Year Review

The contractor shall provide technical support to conduct and draft Superfund five-year reviews. Support may include conducting site inspections and evaluations of response actions (e.g., review of site documents and records related to the operation and maintenance of the facility). Most deliverables will be in the form of draft five-year reviews or alternatively summary documents if specific analyses are requested to support the five-year review.

For more information and guidance related to Superfund five-year reviews, please refer to http://www.epa.gov/superfund/superfund-five-year-reviews.

Exhibit A – Specific Tasks List

This list is not intended to be all inclusive, but it is a historically based list of tasks that support the SOW requirements. For ease of organization, tasks are arranged by the activity where they have typically occurred first, for example, identification of local and elected officials could be performed as either a Response or Assessment activity. Therefore, since Response is the first activity in the SOW the task is listed under Response. This exhibit structure does not preclude using a task in any other contract activity.

SOW Activities:

A. ASSESSMENTS

A. ASSESSMENT

The contractor shall support the EPA in the following tasks:

1. Locate and review existing site, facility, and/or release data.
2. Conduct off-site perimeter visual observation of the site.
3. Conduct site visits to identify all potential hazards. Document site conditions with written and visual documentation.
4. Conduct waste profile analyses.
5. Assess potential impact to endangered species, historical sites, and other cultural resources.
6. Conduct file reviews, for example, federal, state, and local agency records, to obtain background information to analyze releases of hazardous substances, pollutants, contaminants, or oil.
7. Collect or review data such as site management practices, information from generators, photographs, historical photographic analyses, literature searches, and personal interviews.
8. Identify active or historical facility processes or operations that may contribute to the release or threat of release of hazardous substances, pollutants, contaminants, or discharge of oil.
9. Collect, analyze, and validate data in accordance with EPA standard methods for sample collection and analysis. The contractor is required to submit a quality management plan which will be approved by the agency. Once approved by the agency, they will use the approved EPA guidelines as the standard method for sample collection and analysis.
10. Review and interpret environmental data.
11. Identify and address data gaps required to meet EPA assessment objectives, for example, background levels, applicable or relevant and appropriate requirements (ARAR), groundwater information.
12. Install monitoring wells and/or piezometers.
13. Conduct geophysical surveys/investigations.
14. Dispose of investigation derived wastes in accordance with EPA OSWER Directive 9345.3-02, "Management of Investigation-Derived Waste During Site Inspections." The document is available at http://nepis.epa.gov, document number 540G91009.
15. Determine pathway-specific receptors and surrounding population density.
16. Locate other environmentally sensitive receptors, for example, wetlands and endangered species.
17. Provide recommendations and options regarding the following:

- identify releases that pose no significant threat to public health or the environment
- whether an immediate threat to public health or the environment exists
- potential need for a removal action
- further investigation
- no further action
- state referral
- referral to other federal agencies
- referral to other EPA programs
- facility actions
- other actions

18. Collect or develop data to evaluate the release pursuant to the HRS.
19. Collect additional sampling data to adequately develop the HRS package.
20. Collect data required to better characterize the release for more effective and rapid initiation of the RI/FS or response.
21. Generate preliminary HRS score.
22. Analyze site risks regarding whether site contaminants pose a current or potential risk to human health and the environment in the absence of any response action to include the following:

    - contaminant identification
    - exposure assessment
    - toxicity assessment
    - risk characterization
    - provide information necessary to determine whether or not a response is necessary at the site, provide justification for any response action proposed, and explain what exposure pathways need to be addressed

23. Provide a Hazard Ranking System screening in accordance with EPA OSWER Directive 9345.1-07, "The Hazard Ranking System Guidance Manual," dated November 1992, using the HRS Quickscore software. Quickscore information is available at https://www.epa.gov/superfund/superfund-hazard-ranking-system-hrs-quickscore.
24. Report the draft score to the EPA prior to proceeding with the formal HRS package.
25. Prepare a draft HRS package according to EPA guidance to include the following: site summary, HRS Quickscore score sheets, documentation record, figures, maps, and references.
26. Prepare full HRS documentation packages for review and approval by EPA.
27. Upon receipt of EPA's comments, revise and submit a formal HRS package.
28. Update or revise the preliminary HRS Score.
29. Identify data gaps.
30. Perform desktop data collection and evaluation to support the revised score.
31. Perform analytical sampling.
32. Conduct site visits and inspections as necessary to identify, evaluate, and delineate habitat types including wetlands.
33. Collect, review, and/or analyze topographic, photographic, and available relevant data from scientific publications, federal, state and local agencies, and academic institutions to provide support in the identification of physical and biological factors to be considered in the

determination of areas and resources (physical and biological) that have potentially been affected by the release of hazardous substances.

34. Evaluate site data, media, habitats, and ecological relationships to identify, analyze, and document pathways of contaminant migration and concentration. This may include the use of computerized information systems and models.
35. Collect, preserve, identify, and prepare terrestrial and/or aquatic biological specimens for population and community analysis. Evaluation of gross pathology and individual organs and/or cells on a histological or sub-cellular basis for any pathological changes resulting from the release of hazardous substances, oil, or petroleum products.
36. Design, perform, and analyze both field and laboratory bioassay/toxicity tests on plant, invertebrate and vertebrate species.
37. The contractor shall conduct a Targeted Brownfield Assessment Phase 1 in conformance with EPA's final regulations governing All Appropriate Inquiries (40 CFR 312), ASTM International's E1527-05 standard for Phase 1 Investigations, or any subsequent updated ASTM Phase 1 standard.
38. The contractor shall conduct a Targeted Brownfield Assessment Phase 2 in conformance with EPA's final regulations governing All Appropriate Inquiries (40 CFR 312), ASTM International's E1903-97 (2002) standard for Phase 2 Investigations, or any subsequent updated ASTM Phase 2 standard.

Exhibit B – Statutory and Regulatory Framework

SUPERFUND - GENERAL

This list is a representative sample and is not intended to be all inclusive.

I. Laws - Statutes

- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund) (1980), (42 U.S.C. s/s 9601 et. seq.), as amended
- Superfund Amendments and Reauthorization Act (SARA) (1986)
- Community Environmental Response Facilitation Act (1992)
- Asset Conservation, Lender Liability, and Deposit Insurance Protection Act of 1996 (1996)
- The Small Business Liability Relief and Brownfields Revitalization Act (2002)
- Clean Water Act (CWA) (1972), (33 U.S.C. s/s 1251 et. seq.) - particularly Section 311
- Oil Pollution Act (OPA) (1990)
- Resource Conservation and Recovery Act, particularly Subtitle I
- Emergency Preparedness and Community Right-to-Know Act (EPCRA)
- Robert T. Stafford Natural Disaster Act (Stafford Act), (42 USC 5121, et. seq.), as amended
- Homeland Security Act, Public Law 107-296
- Clean Air Act, (42 USC 85), as amended

II. Code of Federal Regulations (CFR)

- National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR Part 300

III. Federal Registers (FR) (significant notices)

- 50 FR 47912; November 20, 1985 - NCP Final Rule (revisions added by CERCLA)
- 55 FR 8666; March 8, 1990 - NCP Final Rule (revisions added by SARA)
- 59 FR 47384; September 15, 1994 - NCP Final Rule (revisions added by OPA)

IV. Executive Orders and Presidential Decision Directives

- EPA's homeland security priorities are based largely on responsibilities outlined in HSPDs at http://www.epa.gov/homelandsecurityportal/laws-hspd.htm. The following have specific EPA tasking:
    a. HSPD-5**:** Management of Domestic Incidents, 2003
    b. HSPD-7: Critical Infrastructure Identification, Prioritization, and Protection, December 2003 (HSPD-7 updates Presidential Decision Directive (PDD)-63, Critical Infrastructure Protection from May 1998)
    c. HSPD-8: National Preparedness, December 2003
    d. HSPD-9: Defense of U.S. Agriculture and Food, January 2004
    e. HSPD-10: Biodefense for the 21 Century, April 2004
    f. HSPD - 12, Policies for Common Identification Standard for Federal Employees and Contractors, 22 August 2004.
    g. HSPD-20: National Continuity Policy, May 2007
- PDD - 39, U.S. Policy on Counter terrorism, 21 June 1995.
- PDD - 62, Protection Against Unconventional Threats to the Homeland and Americans Overseas, 22 May 1998.
- National Security Presidential Directive - 33, Biodefense for the 21st Century, 28 April 2004
- PDD - 2, Implementation of the National Strategy for Countering Biological Threats, 23 November 2009.
- E.O. – 13527, Establishing Federal Capability for the Timely Provision of Medical Countermeasures Following a Biological Attack, 30 December 2009.
- U.S. Policy on Counter-terrorism, dated June 21, 1995 can be located at (www.fas.org/irp/offdocs/pdd39.htm).
- National Response Framework, Department of Homeland Security/FEMA, January 2008

V. Policies and Guidance

- CERCLA/Superfund Orientation Manual, EPA Document Number: 542-R-92-005, website: http://www.epa.gov/superfund/policy/remedy/pdfs/542r-92005-s.pdf
- General Policy on Superfund Ability to Pay Determinations, OECA, September 30, 1997

VI. Other References and Resources

- Superfund Home Page, website: http://www.epa.gov/superfund
- Superfund 30th Anniversary Report, website: http://www.epa.gov/superfund/30years/

<u>DISCOVERY & NOTIFICATION</u>

I. Laws - Statutes

- Section 103 of CERCLA as amended
- Section 304 of EPCRA (1986)
- Section 311 of CWA, as amended by the OPA

II. CFR

- 40 CFR Part 302 - Designation, Reportable Quantities, and Notification
- 40 CFR Part 355 - Emergency Planning and Notification
- 40 CFR Part 110 - Discharge of Oil
- 40 CFR 300.405 - Discovery and Notification (Hazardous Substances)
- 40 CFR 300.300 - Phase 1 - Discovery or notification (Oil)

III. Federal Registers (significant notices)

- 46 FR 22144 - April 15, 1981 - Hazardous Substances Notification of Treatment, Storage, and Disposal Facilities
- 50 FR 13456 - April 4, 1985 - Release Notification Requirements for CERCLA
- 52 FR 13378 - April 22, 1987 - Release Notification Requirements for EPCRA
- 55 FR 45039 - August 25, 1993 - Oil Discharge Regulations
- 61 FR 7421 - February 28, 1996 - Oil discharge Regulations

IV. Other Resources

- Emergency Response Program Reporting website: http://www.epa.gov/epahome/violations.htm

REMOVAL PROCESS

I. Laws - Statutes

- Sections 101 and 104 of CERCLA (definition of and authority for removal response)
- Section 113 of CERCLA (documentation requirements)
- Section 311 of the CWA, as amended by the OPA

II. CFR

- 40 CFR 300.410 - Removal Site Evaluation (Hazardous Substances)
- 40 CFR 300.415 - Removal Action (Hazardous Substances)
- 40 CRF Part 300 Subpart D - Operational Response Phases for Oil Removal

III. Federal Registers (significant notices)

- 55 FR 8666: March 8, 1990 - NCP Final Rule (revisions added by SARA)
- 59 FR 47384: September 15, 1994 - NCP Final Rule (revisions added by OPA)

IV. Policies and Guidance

- Superfund Removal Procedures OSWER, Directive Number: 9360.0-03B
- Guidance on Conducting Non-Time Critical Removal Actions Under CERCLA, Document Number: EPA 540-R-93-057, OSWER Directive Number: 9360.0-32
- Guide to Developing Action Memorandums, OSWER Directive Number: 9360.3-01FS
- Model Program for Removal Site File Management, OSWER Directive Number: 9360.2-01
- Superfund Fact Sheet: The Removal Program, OSWER Directive Number: 9320.0-05FSg
- Consideration of ARARs during Removal Actions, OSWER Directive Number: 9360.3-02 FS

V. Other Resources

- Superfund Office of Land and Emergency Management (OLEM), https://www.epa.gov/aboutepa/about-office-land-and-emergency-management

COMMUNITY INVOLVEMENT

I. Laws - Statutes

- Section 113 of CERCLA

II. CFR

- 40 CFR 300.415(n) - Community Relations in Removal Actions
- 40 CFR 300.430(c) - Community Relations in Remedial Actions
- 40 CFR 300.430(e)(2)(iv) - Technical Assistance for Communities
- 40CFR 300.800 - Administrative Record

III. Federal Registers (significant notices)

- 55 FR 8666; March 8, 1990 - NCP Final Rule (revisions added by SARA)

IV. Policies and Guidance

- Superfund Community Involvement Handbook, Document Number: 540-K-01-003
- Superfund Removal Procedures: Public Participation Guidance for On-Scene Coordinators: Community Relations and the Administrative Record, OSWER Directive Number 9360.3-05
- Risk Assessment Guidance for Superfund: Volume 1, Human Health Evaluation Manual, Part A: Community involvement in Superfund Risk Assessments, Document Number: EPA 540-R-98-042
- Superfund Technical Assistance Grants, OSWER Directive Number: 9230.1-05FSA

V. Other Resources

- Superfund Community Involvement Home Page website: https://www.epa.gov/superfund/superfund-community-involvement

HUMAN HEALTH/ECOLOGICAL RISK ASSESSMENT

For Baseline Human Health Risk Assessments:

- Risk Assessment Guidance for Superfund (RAGS), Volume I: Human Health Evaluation Manual: Part A, Baseline Risk Assessment. Interim Final. December 1989. EPA 540/1-89/002. NTIS PB90-155581.
- Supplement to Part A: Community Involvement in Superfund Risk Assessments. March, 1999. EPA 540-R-98-042. OSWER Directive 9285.7-01E-P. NTIS PB99-963303.
- Part B, Development of Risk-Based Preliminary Remediation Goals. December, 1991. EPA 540/R-92/003. OSWER Directive 9285.7-01B. NTIS PB92-963333.
- Part C, Risk Evaluation of Remedial Alternatives. December 1991. EPA/540/R-92/004. OSWER Directive 9285.7-01C. NTIS PB92-963334.
- Part D, Standardized Planning, Reporting and Review of Superfund Risk Assessments. January 1998. EPA 540-R-97-033. OSWER Directive 9285.7-01D. NTIS PB97-963305.
- Risk Assessment Guidance for Superfund, Volume III - Part A, Process for Conducting Probabilistic Risk Assessment. December, 2001. EPA 540-R-02-002. OSWER Directive 9285.7-45. NTIS PB2002 963302.
- Supplemental Guidance to RAGS: Calculating the Concentration Term. June 22, 1992. OSWER Directive 9285.7-08I.

- Standard Default Exposure Factors. Interim Final. OSWER Directive 9285.6-03. March 25, 1991.
- Final Guidance Data Useability in Risk Assessment (Part A). April 1992. OSWER Directive 9285.7-09A. NTIS PB92-963356.
- Guidance for Data Useability in Risk Assessment (Part B). May 1992. OSWER Directive 9285.7-09B. NTIS PB92-963362.
- Dermal Exposure Assessment: Principles and Applications. January 1992. EPA 600/8-91/011B.
- Exposure Factors Handbook, Volume 1. 1997. EPA/600/P-95/002Fa.
- Exposure Factors Handbook, Volume 2. 1997. EPA/600/P-95/002Fb.
- Exposure Factors Handbook, Volume 3. 1997. EPA/600/P-95/002Fc.
- Air/Superfund National Technical Guidance Study Series, Volumes I, II, III, and IV. 1989. EPA 450/1-89-001,002,003,004.
- Final Soil Screening Guidance, May 17, 1996. Soil Screening Guidance User's Guide. Office of Solid Waste and Emergency Response. EPA/540/R-96/018.
- Soil Screening Guidance: Technical Background Document. EPA 540/R-94/126.
- EPA Risk Characterization Program. Memorandum from Administrator Carol Browner. Office of the Administrator, Washington, DC. March 21, 1995.
- Provisional Guidance for Quantitative Risk Assessment of Polycyclic Aromatic
- Hydrocarbons. Office of Research and Development, Washington, DC. EPA/600/R-93/C89.
- PCBs: Cancer Dose-Response Assessment and Application to Environmental Mixtures. Office of Research and Development, Washington, DC. EPA/600/P-96/001A.
- Revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities. July 14, 1994. OSWER Directive 9355.4-12.
- Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. December, 2002. OSWER Directive 9285.6-10.
- For Baseline Ecological Risk Assessments:
- Guidelines for Ecological Risk Assessment, Final. April 1998. EPA/630/R-95-002F.
- Ecological Risk Assessment Guidance for Superfund, Process for Designing and Conducting Ecological Risk Assessments. June 1997. EPA/540-R-97-006. OSWER Directive 9285.7-006. NTIS PB97-963211.
- Ecological Risk Assessment / Management Principles. October, 1999. OSWER Directive 9285.7-28P.
- Ecological Assessment of Hazardous Waste Sites: A Field and Laboratory Reference Document. EPA 600/3-89/013. March 1989.
- EcoUpdate: Intermittent Bulletins, Supplemental Guidance to RAGS, Vol. II. EPA Publications 9345.0-051.

Exhibit C – Acronyms

ARAR	Applicable or Relevant and Appropriate Requirements
ASTM	American Society for Testing and Materials
BA	Brownfields Assessment
CAA	Clean Air Act
CBRN	Chemical, Biological, Radiological, Nuclear
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CERCLIS	Comprehensive, Environmental Response, Compensation & Liability System
CFR	Code of Federal Regulations
CLP	Contract Laboratory Program
CO	Contracting Officer
COR	Contracting Officer's Representative
CSA	Chemical Safety Audit
CT	Counter Terrorism
CWA	Clean Water Act
DQO	Data Quality Objective
E.O.	Executive Order
EE/CA	Engineering Evaluation/Cost Analysis
EOC	Emergency Operation Center
EOC	Emergency Operations Center
EPA	Environmental Protection Agency
EPASS	EPA Personnel Access and Security System
EPCRA	Emergency Preparedness and Community Right to Know Act
e-QIP	Electronic Questionnaires for Investigations Processing
ERNS	Emergency Response Notification System
ERRS	Emergency and Rapid Response Services
ESI	Expanded Site Inspection
ESI/RI	Expanded Site Inspection and Remedial Investigation
FAR	Federal Acquisition Regulation
FBI	Federal Bureau of Investigation
FEMA	Federal Emergency Management Agency
FOIA	Freedom of Information Act
FR	Federal Register
FRP	Facility Response Plan
GFP	Government Furnished Property
GIS	Geographical Information System
HAZCAT	Hazard Categorization
HAZWOPER	Hazardous Waste Operations and Emergency Response
HRS	Hazard Ranking System
HSP	Health and Safety Plan
HSPD	Homeland Security Presidential Directive
IA	Integrated Assessment
ICS	Incident Command System
IRIS	Integrated Risk Information System
IS	Independent Study
METH	Methamphetamine
MSHA	Mine Safety and Health Administration
NACI	National Agency Check and Inquiries

NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NIMS	National Incident Management System
NIOSH	National Institute for Occupational Safety and Health
NPFC	National Pollution Fund Center
NPL	National Priorities List
NRF	National Response Framework
NTIS	National Technical Information Service
OPA	Oil Pollution Act
OPM	Office of Personnel Management
OPP	Oil Pollution Prevention
OSC	On-Scene Coordinator
OSHA	Office of Safety and Health Administration
OSWER	Office of Solid Waste and Emergency Response
PA	Preliminary Assessment
PA/SI	Combined Preliminary Assessment and Site Inspection
PDD	Presidential Decision Document
PO	Project Officer
POC	Point of Contact
POLREP	Pollution Report
PPE	Personal Protection Equipment
PRP	Potentially Responsible Party
PSB	Personnel Security Branch
QA	Quality Assurance
QAPP	Quality Assurance Project Plan
QC	Quality Control
RA	Removal Assessment
RAGS	Risk Assessment Guidance for Superfund
RCP	Regional Contingency Plan
RCRA	Resource Conservation and Recovery Act
REOC	Regional Emergency Operations Center
RI	Remedial Investigation
RI/FS	Remedial Investigation/Feasibility Study
RMP	Risk Management Plan
RQ	Reportable Quantity
RRT	Regional Response Team
SAM	System for Award Management
SARA	Superfund Amendments and Reauthorization Act
SI	Site Inspection
SIP	Site Inspection Prioritization
SMD	Security Management Division
SOW	Statement of Work
SPCC	Spill Prevention Controls and Countermeasures
SR	Site Reassessment
START	Superfund Technical Assessment & Response Team
USCG	United States Coast Guard
WMD	Weapons of Mass Destruction

Exhibit D – Levels of Personal Protective Equipment

Personal Protection Equipment (PPE) requirements are determined by the NIOSH/OSHA USCG/and the EPA Occupational-Safety and Health Guidance Manual for Hazardous Waste Site Activities issued in October 1985. Download at https://www.osha.gov/Publications/complinks/OSHG-HazWaste/all-in-one.pdf. Additional guidance is given in EPA Standard Operating Safety Guides, Publication 9285.1-03, dated June 1992. These guidance documents, or their updated versions, will be the final determination for personal protection guidance in this contract. All equipment associated with a particular level of protection, or modified level of protection, is to be supplied by the contractor for each site. Details of the appropriate level of protection will be covered in the HSP.

In an explosive atmosphere, intrinsically safe equipment is a requirement. Optional equipment must be available, depending upon site exigencies.

1. LEVEL A[1,2]

    - Pressure-demand, 4500 psi self-contained breathing apparatus (Mine Safety and Health Administration (MSHA)/NIOSH approved)
    - Fully encapsulating chemical-resistant suit
    - Coveralls*
    - Underwear, long cotton underwear*
    - Gloves (outer), chemical-resistant
    - Gloves (inner), chemical-resistant
    - Boots, chemical-resistant, steel toe and shank. (Depending on suit, boot worn over or under suit boot)
    - Hard hat* (under suit)
    - 2-way radio communications (intrinsically safe)
    - Disposable protective suit,
    - Disposable gloves, and
    - Disposable boots* (Worn over fully encapsulating suit)

2. LEVEL B

- Pressure-demand, self-contained breathing apparatus (MSHA/NIOSH approved)
- Chemical-resistant clothing (overalls and long sleeve jacket; coveralls; hooded, one or two-piece chemical-splash suit; disposable chemical-resistant coveralls)
- Coveralls*
- Gloves (outer) chemical-resistant
- Gloves (inner) chemical-resistant
- Boots (outer) chemical-resistant, steel toe and shank
- Boots (outer) chemical-resistant (disposable)*
- Hard hat (face shield*)
- 2-way radio communication (intrinsically safe)

[1] Must also meet the National Fire Protection Association Standard 1991 as amended in 1994 (and as subsequently updated).
[2] Note: Offeror shall maintain an adequate supply of Level A protective gear for both industrial chemical and chemical and biological warfare agent responses.

3. LEVEL C

- Full-face, air purifying respirator, (MSHA/NIOSH) approved
- Chemical-resistant clothing
    - One piece coverall; Hooded,
    - Two piece chemical splash suit;
    - Hood and apron;
    - Disposable coveralls*
    - Gloves (outer)
    - Gloves (inner)
    - Boots, steel toe and shank
    - Boots (outer) (disposable)*
- Hard hat (face shield*)
- Escape mask*
- 2-way radio communications (intrinsically safe)

4. LEVEL D

- Coveralls
- Gloves
- Boots/shoes, safety or chemical-resistant steel toe and shank
- Boots (outer) chemical-resistant, disposable*
- Safety glasses or chemical splash goggles*
- Hard hat (face shield)*
- Escape mask*

* Optional at the discretion of the OSC or Remedial Project Manager.

Exhibit E – EPA Regional Offices

EPA has ten regional offices, each of which is responsible for several states and territories. Each Regional Office is responsible within its states for the execution of the Agency's programs.

Region 1	Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut
Region 2	New York, New Jersey, Puerto Rico, and Virgin Islands
Region 3	Pennsylvania, West Virginia, Virginia, Maryland, Delaware, and District of Columbia
Region 4	Kentucky, Tennessee, North Carolina, South Carolina, Georgia, Alabama, Mississippi, and Florida
Region 5	Minnesota, Wisconsin, Michigan, Illinois, Indiana, and Ohio
Region 6	Texas, Oklahoma, New Mexico, Arkansas, and Louisiana
Region 7	Iowa, Nebraska, Kansas, and Missouri
Region 8	Colorado, Montana, North Dakota, South Dakota, Wyoming, and Utah
Region 9	California, Nevada, Arizona, Hawaii, Guam, Trust Territories, American Samoa, and Northern Mariana Islands
Region 10	Washington, Oregon, Idaho, and Alaska

EPA CROSSOVER AND BACKUP REGIONAL NETWORK

Every Region has established a Memorandum of Understanding with its backup Regions for the purposes of providing and receiving cross-regional support during significant incidents that may exhaust the personnel or resources of one Region. Each EPA Region should have access to, and the ability to accommodate, a primary and a secondary backup Region, as well as other Regions' and National assets, as needed.

The EPA Core Emergency Response program includes the following standard for backup Regions:

Region	Primary Backup Region	Secondary Backup Region
1	2	8
2	1	6
3	4 and 5	-
4	3 and 5	-
5	3, 4, and 6	7
6	7	5 and 2
7	5	6
8	9	10 and 1
9	8	10
10	9	8

Notes:

Regions 1 and 2 have an agreement for mutual primary support.
Regions 1 and 8 have an agreement for mutual secondary support.
Regions 2 and 6 have an agreement for mutual secondary support.
Regions 3, 4 and 5 have a 3-way agreement for primary support.
Regions 5, 6, and 7 have a 3-way agreement for primary and secondary support.
Regions 8, 9, and 10 have a 3-way agreement for primary and secondary support.

Exhibit F – Levels of Personnel Background Check and Drug Screening for Contractor Employees

The contractor shall provide qualified personnel that meet the background check and drug screening requirements established below. The EPA has established two levels of criteria. The Level 1 background check criteria apply to all contractor employees working at a response site. Level 2 contains background check criteria and drug screening requirements that apply to all contract employees working at sites that are designated by EPA as "Sensitive Sites." Examples of such sites include those that involve law enforcement activities, apparent or suspected terrorist activities, any indoor cleanups (including private residences), drug lab cleanups, and response actions at geographically sensitive locations such as military installations and government buildings. The Contracting Officer or On-Scene Coordinator will notify the Contractor whenever EPA designates a response site as a sensitive site. The designation will be provided to the Contractor in the task order, work assignment, or verbally, as the situation warrants. If a background check has been performed within one (1) year prior to the requirement for the background check, the contractor need not conduct another background check.

LEVEL 1 - EPA Background Check Criteria:

- Can be a non U.S. citizen with a valid visa.
- No convictions for crimes involving issues of National Security. A "national security crime" is defined as any criminal activity involving espionage or foreign aggression against the United States, intelligence or counterintelligence activities, including development of defense plans or policies, concerned with undermining or overthrowing the government of the United States and unlawful handling or disclosure of classified information.
- No weapons offense in the last five (5) years.
- No felony conviction in the last three (3) years.
- Not a fugitive from justice.
- Not listed in the System for Award Management (SAM) as an excluded party. SAM is a web-based database that consolidates information from throughout the U.S. Government on federal contracts or subcontracts. The SAM is available at: http://www.sam.gov.

LEVEL 2 - EPA Background Check Criteria For Sensitive Sites:

- Must be a U.S. citizen.
- No convictions for crimes involving issues of National Security. A "national security crime" is defined as any criminal activity involving espionage or foreign aggression against the United States, intelligence or counterintelligence activities, including development of defense plans or policies, concerned with undermining or overthrowing the government of the United States and unlawful handling or disclosure of classified information.
- No weapons offense in the last ten (10) years.
- No felony conviction in the last seven (7) years.
- No misdemeanor conviction in the last five (5) years.
- No convictions for three (3) separate offenses in the last ten (10) years (excluding traffic offenses).
- Not a fugitive from justice.
- Not listed in the System for Award Management (SAM) as an excluded party. SAM is a web-based database that consolidates information from throughout the U.S. Government on federal contracts or subcontracts. The SAM is available at: http://www.sam.gov.

- Drug Screening at Sensitive Sites:
  Contractor employees working at designated "Sensitive Sites" must pass, within the previous 90 calendar days, a drug test for the presence of marijuana, cocaine, opiates, amphetamines, and phencyclidine in conformance with the Mandatory Guidelines for Federal Workplace Drug Testing Programs first published by the Department of Health and Human Services in the Federal Register on April 11, 1988 (53 FR 11979, and revised on June 9, 1994 (59 FR 29908), on November 13, 1998 (63 FR 63483), and on April 13, 2004 (69 FR 196440); and Procedures for Transportation Drug Testing Programs, 49 CFR Part 40. References to "DOT "shall read, as "EPA" and the split sample method of collection shall be used.

The requirements in Level 1 or 2 may be waived by the Contracting Officers, on a case-by-case basis, at a specific location, or for a specific individual.

If the results of an employee's background check or drug screening do not meet the criteria in either level 1 or 2, as required, the Contractor may apply for a waiver. To initiate the waiver process, the contractor must submit, in writing, the background report or drug test on the employee and an explanation of the need for the employee for approval by the Agency before the employee performs contract services for EPA. The contracting officer will notify the contractor of the Agency decision within five (5) days of receipt of the contractor's request for a waiver. The contractor shall submit its request to the Director, Superfund/RCRA Regional Procurement Operations Division at:

By Mail:

U.S. Environmental Protection Agency
Director, Superfund/RCRA Regional Procurement Operations Division
Mail Code 3805R
1200 Pennsylvania Avenue, NW
Washington, DC 20460

By Courier/Hand Carried:

U.S. Environmental Protection Agency
Raoul Scott, Director
Superfund/RCRA Regional Procurement Operations Division
Bid and Proposal Room
Ronald Reagan Building, 6th floor, Room 61107
1300 Pennsylvania Avenue, NW
Washington, DC 20004

The Bid and Proposal Room hours of operation are 8:00 AM - 4:30 PM weekdays, except Federal holidays.

Exhibit G – Agency Security Requirements for Contractor Personnel

To safeguard the EPA workforce and comply with Homeland Security Presidential Directive 12 (HSPD-12), Executive Order (E.O.) 13467, E.O. 13488 and Office of Personnel Management (OPM) regulations, the EPA requires the following:

- **For Unescorted Access for 6 Months or Less**
  Contractor employees needing unescorted physical access to a controlled EPA facility[3] for 6 months or less must be determined by the EPA to be fit before being issued a physical access badge (picture identification). A fitness determination is, per E.O. 13488, a decision by an agency that an individual has or does not have the required level of character and conduct necessary to perform work for or on behalf of a federal agency as a contractor employee. A favorable fitness determination is not a decision to contract with an individual. Contractor employees must undergo, at a minimum, an FBI fingerprint check of law enforcement and investigative indices (see Section 2).

- **For Unescorted Access for More than 6 Months**
  Contractor employees needing unescorted access to a controlled EPA facility for more than 6 months are required to have an HSPD-12 smart card, called an EPASS badge. Eligible contractor employees must have a completed or initiated background investigation at the National Agency Check and Inquiries (NACI) level or above, comply with all other investigative and HSPD-12-related requirements, and be determined by the EPA Personnel Security Branch (PSB) to be fit (see Section 3). "Initiated" means that all initial security requirements have been met (paperwork is completed, submitted, and PSB-approved; favorable fingerprint results have been received; funding has been provided to cover the cost of the investigation; and PSB has sent notification that the individual may begin work).

To ensure timely contract performance, the contractor must be prepared to immediately submit upon contract award the contractor employee information detailed in Section 1.c. This applies also to incumbent contractors' employees for follow-on acquisitions. All contractor employees under a new contract are subject to the requirements in Sections 2 or 3; however, the time needed to meet security requirements may be shorter for personnel who already have a favorable fitness determination.

Contractor employees may begin work on the contract start date provided all applicable documentation in Sections 1, 2, and 3 has been received by EPA and there is no derogatory information to preclude a favorable determination. Timely submission of contractor employees' security forms and other required documentation is essential.

A favorable determination may be revoked at any time should EPA discover derogatory information that deems a contractor employee unfit. Contractor employees deemed unfit will not be allowed to continue under the contract, and the contractor will be responsible for providing replacements acceptable to EPA.

EPA may make a determination of a contractor employee's fitness at any of the following points:

- When EPA prescreens the individual's security forms. "Red flag" issues include:

[3] A controlled facility is an area to which security controls have been applied to protect agency assets. Entry to the controlled area is restricted to personnel with a need for access.

    - Having been fired from a previous job or having left under unfavorable circumstances within the past 5 years (or longer, depending on the security form questions and type of investigation);
    - Failure to register with the Selective Service System (applies to male applicants born after December 31, 1959);
    - Within the past 5 years (or longer, depending on the security form questions and type of investigation), any arrest, charge, or conviction that has been upheld for violent or dangerous behavior or a pattern of arrests that demonstrates disregard for the law; or
    - Illegal drug use within the previous year, or drug manufacture or other involvement for profit within the past 5 years (or longer, depending on the security form questions and type of investigation).
- When FBI fingerprint results are returned to the EPA;
- When OPM returns the individual's investigative results to the EPA; and
- When the EPA becomes aware that the contractor employee may not be fit to perform work for or on behalf of a federal agency. The contractor is responsible for monitoring its employees' fitness to work and notifying the EPA immediately of any contractor employee arrests or illegal drug use.

Initial Contractor Requirements

This section contains the contractor's initial security requirements, which must be met before contractor employees can perform work **on-site** at EPA under this contract.

- The contractor must identify a point of contact (POC) and alternate POC to facilitate security processes.

- The contractor must ensure that all foreign nationals who will work under this contract have a valid U.S. Immigrant Visa or nonimmigrant Work Authorization Visa. The contractor must use E-Verify to verify employment eligibility as required by the FAR.

- EPA requires contractor employee information for the investigative and EPASS processes. Immediately upon contract award or anytime new personnel are brought onboard, the contractor POC must log on to a secure, EPA-identified portal, create an account, and submit complete contractor employee information: Full name (as found on employment records and driver's license), Social Security number, date of birth, place of birth (city, state, country), citizenship, employee email address, EPA Program Office or Regional Office, and EPA work city and state. Note: Incomplete names, inaccurate names, and nicknames are unacceptable and may delay contractor employees' start date. Instructions and the portal link will be provided upon contract award.

- EPA will provide the login information for the portal. After submission of the contractor employees' data, the COR will notify the contractor POC if additional information or corrections are required. The COR's approval of the information triggers the investigative and EPASS processes.

Requirements for Contractor Employees Needing Unescorted Access for 6 Months or Less

- This section contains the requirements for contractor employees who are not eligible for an EPASS badge but who need unescorted physical access. The minimum security requirement is an FBI fingerprint check.

    - Before the contractor employee can begin work on-site at the EPA:
        - He/she must be fingerprinted by the EPA; arrangements will be made by the COR.
        - The contractor employee must satisfactorily respond to all questions/information requests arising from the EPA's review of the fingerprint results.
        - EPA must determine that the fingerprint results are favorable.

- Once all requirements in Section 2(a) are met, the COR/PO and contractor employee will be notified that the contractor employee can start work. Contractor employees will be issued a physical access badge and may work on-site at EPA. Contractor employees must sign a receipt acknowledging responsibility to safeguard the badge and surrender it when required (see Section 4.b).

Requirements for Contractor Employees Needing Unescorted Access for more than 6 Months

This section contains the requirements for contractor employees who are eligible for an EPASS badge and who must have, at a minimum, a NACI background investigation completed or initiated. Contractor employees needing access to sensitive information or otherwise occupying moderate or high-risk positions must undergo an investigation above the NACI level. The EPA will assign a position risk level to each position on the contract and identify which contractor employees are EPASS-eligible.

- EPASS-eligible contractor employees must undergo a background investigation appropriate to the risk level of the position occupied, as specified by the EPA; the minimum acceptable investigation is a NACI.

- Employees who have previously undergone a federal background investigation at the required level and who have worked for or on behalf of the federal government without a break in service since the investigation was completed may not need a new investigation. EPA will verify the investigative information and notify the contractor employee and COR if a new investigation is required. If an investigation is not needed, the contractor employee must still be fingerprinted by EPA for an FBI fingerprint check and have favorable fingerprint results returned before beginning work on-site at EPA.

- Before beginning work on-site at EPA, contractor employees who require a new background investigation must:
    - Complete and submit the appropriate OPM security questionnaire specified by the EPA via OPM's Electronic Questionnaires for Investigations Processing (e-QIP) system. Access to e-QIP will be provided by EPA. Foreign national contractor employees must, on the security questionnaire, provide their alien registration number or the number, type, and issuance location of the visa used for entry to the United States.

- For a NACI only, also complete the OF 306, Declaration for Federal Employment, as required by OPM for any NACI and available at http://www.opm.gov/forms/pdf_fill/of0306.pdf. Contractor employees must answer questions 1-13 and 16, then sign the form on the "Applicant" line, 17a.
- Follow all instructions on the form(s), answer all questions fully, and submit signature pages as directed by EPA.
- Be fingerprinted by EPA; arrangements for fingerprinting will be made by the COR.
- Satisfactorily respond to all questions/information requests arising from EPA's review of the forms or fingerprint results.
- Receive favorable fingerprint results.

o Once all requirements in Section 3(c) are met, the COR/PO and contractor employee will be notified that the contractor employee can start work. Contractor employees may work on-site at EPA while OPM conducts the background investigation.

o At a time and location specified by the EPA, contractor employees must report in person for EPASS identity proofing and show two unexpired forms of identification from the lists on Department of Homeland Security Form I-9. At least one of the documents must be a valid, unexpired state or federal government-issued photo ID; non-U.S. citizens must show at least one ID from Column A on Form I-9.

o Before being issued an EPASS badge, contractor employees must sign a receipt acknowledging responsibility to safeguard the badge and surrender it when required (see Section 4.b). Contractor employees must meet all EPASS badge life-cycle requirements.

o A contractor employee has the right to appeal, in writing through the contractor POC to the COR, the denial or revocation of an EPASS badge. If the COR believes the appeal is justified, he/she will forward it to the Security Management Division (SMD). SMD's decision on behalf of the EPA will be final.

Ongoing Contractor Security Responsibilities

- The contractor POC must immediately provide updated information via the secure portal when new contractor employees are added to the contract. These contractor employees must meet all initial investigative requirements before beginning work on-site at EPA. The contractor POC must also update information via the secure portal whenever a contractor employee leaves the contract.

- The contractor POC must ensure that all EPA physical access and EPASS badges are returned to the COR as soon as any of the following occurs, unless otherwise determined by the Agency: (i) when the badge is no longer needed for contract performance; (ii) upon completion of a contractor employee's employment; (iii) upon contract completion or termination.

- These EPA security requirements must be incorporated into all resulting subcontracts wherein contractor personnel working under the subcontract require EPA physical access.

Exhibit H – Green Audit Checklist

Below is a list of audit categories to be considered for site work and technical projects, as well as office and contract administration.

Emissions

- Heavy Equipment
- Idling Practices
- Disposal Facilities

Sampling

- Samples processed on-site
- Location of off-site laboratory
- Dedicated/Reusable sampling equipment

Water Use

- Time taken to re-vegetate excavated/impacted areas
- Flora selection
- Water used to maintain re-established vegetation
- Dust suppression
- Equipment & heavy equipment decontamination

Material Consumption & Waste

- Green purchasing
- Recycling
- Reduction of paper consumption via electronic deliverables
- Carpooling
- Certified green hotels
- Power reduction practices
- Renewable energy practices

Ecosystem

- Flora
- Water

Best Management Practices

- Bioremediation
- Clean Fuels & Emissions
- Excavation & Equipment
- Renewable energy integration
- Landfill covers
- Pump & treat technologies
- Soil vapor extraction